



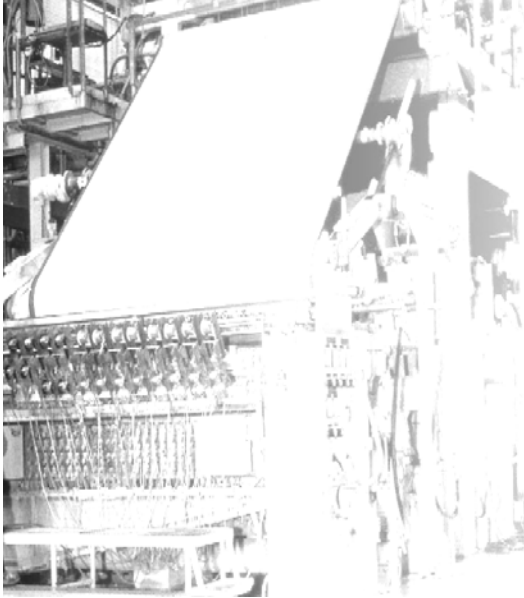
x . p l a n t

Xantus Plant Information System

A complete information system for manufacturing industries



- Increased productivity
- Higher quality
- Increased resource utilization
- Higher delivery performance
- Less unsaleables
- Less capital employed
- Improved bottom line



Xantus x.plant

x.plant is a powerful software to plan, control and follow-up production processes in manufacturing industries and is a complement to existing ERP-systems. The system gives the user support for production planning and detailed information about manufacturing times, production downtime, material flow and warehouse status. The complete information about manufacturing times and the material flow considerably improves the preconditions for good communications between the management and the production.

The system also supports the production personnel with information about tool and machine settings, service intervals etc.

The software uses data from the ERP-system and sends back data about events in the manufacturing process. Dynamic information about articles, orders and warehouses therefore only need to be maintained in the ERP-system.

x.plant is developed for Windows and the system's workstations can be both personal computers and mobile computers. The layouts for the display units have been developed for use in production environment.

x.plant is a complete system for handling information in the production.

x.plant is a complement to the existing ERP-system

x.plant - Modules

x.plant is built-up by nine modules. Often there is only need for some of the functionality that x.plant has and therefore only the functions that the actual user requires are chosen for installation. If it's only required to follow-up the material flow, only that module is installed.

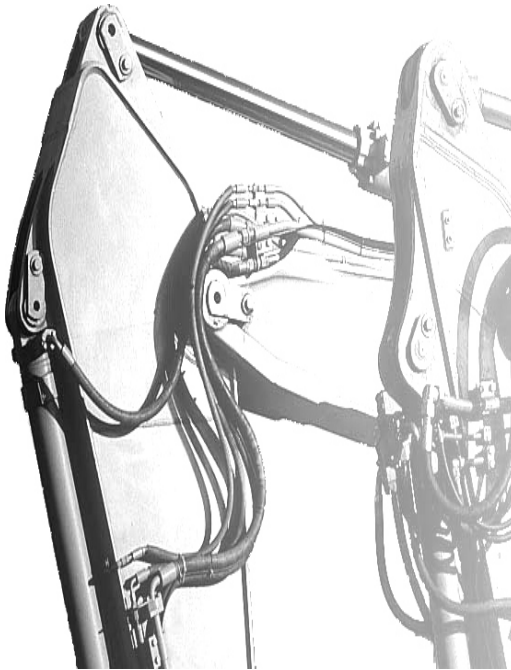
The system can be extended to handle information that is specific to a certain industry. Names and terms are adapted to be in accordance with those that are used in the production. Different industries use names like production order, process order and production plan differently. x.plant always uses the terminology that is established within the company.

Xantus x.plant has the following modules:

- PF – Material flow
- PT – Manufacturing times and down time
- PL – Warehouse control
- PR – Resource and tool data handling
- PI – Information screens and reports
- PQ – Quality control
- PE – Equipment efficiency
- PA – Data acquisition
- PP – Production planning

x.plant is built-up by modules and only the modules that are required are installed.

Each user has individually specified access to the system's functions. The management is interested in efficiency reports while the production uses the modules for material flow, manufacturing times, tool data handling etc.



PF – Material flow

All items and all batches are marked with a barcode or an RFID-tag. The marking is then read at all production stations and warehouse locations on the item's path through the production process and the product's development is registered together with the time in the system database. This makes it possible to follow-up the warehouse, the material flow and WIP at any chosen time.

PT – Times and downtime follow-up

This module acquires information about machine down time by means of electronic sensors installed at the production lines. This is a faster means to register and monitor disturbances in the production and gives more correct data. In this way the management get correct information about both the current and the historical situation in the production.

PL – Warehouse control

x.plant has functionality for the registration of in-load and take-out from the raw materials, semi-finished goods and finished goods warehouses. The system has algorithms to suggest the most suitable place for storage and to suggest the most suitable individual for take-out. These functions are developed to be efficient with wireless mobile units that have direct communications with the database. x.plant gives the user full overview of the transportation needs.

x.plant makes it possible to easily check and follow up the warehouse status for raw materials, semi-finished goods and finished goods. Also the WIP can easily be checked and followed-up. This implies that the user easily can find certain individuals in the production environment.

x.plant makes it possible to fast and easily check the stock for raw materials, semi-finished goods and finished goods. WIP can also easily be checked.

PR – Resources and tools

The PR-module handles the information about machine and tool settings. The software module stores machine settings for various configurations, keeps record of the use of machine parts and makes it possible to register information about repairs and maintenance. Machine resources can be prioritized and the system can thereby suggest how replacements of these resources are done best. There is also functionality to make use of mobile computers over WLAN, which gives an efficient means of information registration and presentation in the production environment.

PI – Information screens and reports

Data about manufacturing times and material flow that the system has registered can be presented in a large number of standardized and informative reports. The reports can be exported to other formats e.g. Microsoft Excel for further processing.

x.plant generates reports about manufactured goods and consumed materials and can list production for various operations within production orders. Graphs and production reports to present an overview of the production results can also be generated. The system can also show data for materials in stock and WIP. For all reports a large number of selection criteria are available, making it easy to take out exactly the information you are interested in.

PQ – Quality control and traceability

x.plant stores information about the material flow and at what time it has passed or reached production stations and warehouses. This makes it possible to trace raw materials and semi-finished goods through the manufacturing process to finished goods. With PQ you can recreate the production situation historically at any given time. This gives the user excellent possibilities to traceability on complaints caused by defectives in processes or materials. The module also handles the quality control of incoming materials from suppliers, which gives statistical figures on products and suppliers.

PE – Equipment efficiency

The PE-module makes it possible to follow-up the equipment efficiency. Efficiency data like OEE and REE are calculated for given time frames and presented in tables and graphs, which show the variation of these data over time. Information about the length and frequency of various downtime reasons are also presented in tables and graphs.

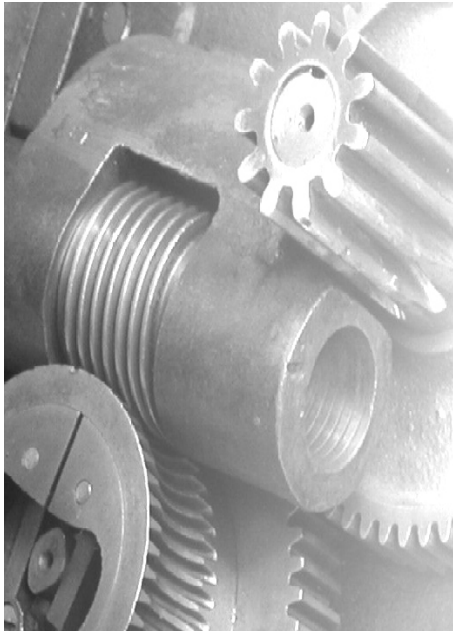
PA – Data acquisition

The PA-module is used in production situations that require very high system accessibility. The data acquisition module works with full functionality even when x.plant has no contact with the ERP-system. The module makes a bridge between x.plant's other functions and factory equipment e.g. PLC-systems, auto labeling equipment, scales etc.

The PA-module is typically installed on an industrial-PC close to the production line and is most often connected via serial communication.

PP – Production planning

The PP-module has a graphical user interface that gives the production planner an excellent overview of the planning situation. The planner simulates the production plan in the PP-module and when it's made up the production orders can be transferred to the ERP-system. Resource utilization, historical and prognosticated inventory levels are also presented graphically. When the production time is based on estimated customer demand the optimal production order time also is shown graphically. The module can also automatically create a production plan via its Autoplan function. With Autoplan no manual assistance is needed to create a production plan based on prognosticated customer demand.



Xantus Informationsteknik has for more than ten years supplied information systems to the manufacturing industry. Our competences are mainly in planning, SCM and production information systems.

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User friendly

x.plant is a user friendly system, both for the management and for the production personnel. The system is developed for Windows, which implies that most users easily can orientate between the various functions. The layouts for the display units are adapted for quick and easy usage in production environment. The information windows are large and clear and are very well suited to use with touch display units.

x.plant is cost efficient

Xantus x.plant is a PC-based system that complements the existing ERP-system and communicates production data to the superior system. Common data like production orders are fetched from the ERP-system and need only to be maintained there. x.plant can be used in conjunction with most of the existing ERP- and MRP-systems on the market. Low investment in hardware and simple maintenance makes x.plant very cost efficient. x.plant is very flexible and can be extended when the needs are changed.